



COUNTY OF SAN DIEGO
DEPARTMENT OF PLANNING AND LAND USE: Zoning
RECLAMATION PLAN REQUIRED PURSUANT TO
CALIFORNIA SURFACE MINING AND
RECLAMATION ACT OF 1975

The following are minimum acceptable practices to be followed in surface mining operations pursuant to Section 3504 of the State Policy for Surface Mining and Reclamation Practice:

1. Soil Erosion Control.

- a. The removal of vegetation and overburden in advance of surface mining shall be kept to the minimum.
- b. Stockpiles of overburden and minerals shall be managed to minimize water and wind erosion.
- c. Erosion control facilities such as retarding basins, settling ponds, ditches, streambank stabilization and diking shall be constructed and maintained where necessary to control erosion.

2. Water Quality and Watershed Control.

- a. Compliance with U.S. Environmental Protection Agency, Regional Water Quality Control Boards, State Department of Fish and Game, and certain other agency's regulations and requirements.
- b. Settling ponds or basins shall be constructed downstream from areas of potential erosion at operations where they will provide a significant benefit to water quality.
- c. Temporary stream and watershed diversion shall be restored in final reclamation wherever practical.
- d. At sites where groundwater recharge is a significant consideration, operations shall be conducted to substantially prevent siltation of recharge areas.

3. Flood Control. Compliance with the requirements of other agencies in addition to the Lead Agency, such as: the State Reclamation Board, local flood control districts, the U.S. Corps of Engineers and the State Department of Fish and Game, when operations occur in near streams and other drainage channels.

4. Protection of Fish and Wildlife Habitat. All reasonable and practicable measures should be taken to protect the habitat of fish and wildlife.

5. Disposal of Mine Waste Rock and Overburden. Permanent piles or dumps of mine waste rocks and overburden shall be stable and shall not restrict the natural drainage without suitable provisions for diversion. Stable slopes at angle of repose shall be permitted as a final slope. Old equipment and other similar inert mining wastes shall be removed and buried. Toxic material shall be removed or protected to reduce leaching to available levels. Under some conditions, covering part or all of the mine waste piles with overburden, fine waste and soil may be desirable. Where reasonable choices exist, dumps shall be located in a least visible location. "Controlled placement" of this material with relationship to topography, hydrology and end use features can greatly enhance the results of a reclamation program.

6. **Soil Salvage.** The salvage of existing topsoils is an important factor in revegetation and thus is a crucial part of the reclamation process. A soil survey may be necessary to establish soil type, depth and soil chemistry. The complexity of such a survey will be dependent on-site geology, vegetation and area extent, as well as on post-mining uses. In areas of good soil development, topsoil is a valuable asset and should be segregated for further use in revegetation. Desert district and other areas of limited soil development may require special study to determine the benefits and practicality of soil salvage. In some areas, because of poor or very limited soil conditions, it may be impractical or impossible to salvage soil.
7. **Final slope Gradient.** The designated steepness and proposed treatment of the mined lands' final slopes shall take into consideration the physical properties of the slope material, its probable maximum water content, landscaping requirements and other factors. The maximum stable slope angle might range from 90° in a sound limestone, igneous rock or similar hardrock to less than 20° in highly expansive clay. In all cases, Reclamation Plans shall specify slope angles flatter than the critical gradient for type of material involved. Whenever final slopes approach the critical gradient for the type of material involved, regulatory agencies shall require an engineering analysis of the slope stability. Special emphasis on a slope stability and design will be necessary when public safety or adjacent property may be affected.
8. **Backfilling and Grading.** Most backfilling and grading is undertaken to store mine waste rock and overburden, to produce designed slopes, to establish drainage or to raise the ground surface above the local water table. Any area mined to produce additional materials for backfilling and grading must also be included in the Reclamation Plan.

Settlement of filled areas must be considered in all Reclamation Plans. Where probable ultimate site uses include roads, building sites, or other improvements sensitive to settlement, the Reclamation Plans shall include compaction of the fill materials in conformance with good engineering practice to avoid excessive settlement. Fill placement shall conform to local grading ordinances or, in their absence, the Uniform Building Code.

9. **Erosion and Drainage.** Grading and revegetation shall be designed to both prevent excessive erosion and to convey surface runoff to natural drainage courses or interior basins designed for water storage. Basins that will store water during periods of surface runoff shall be designed to prevent downward erosion of spillways when these basins have outlet to lower ground.
10. **Resoiling.** When the Reclamation Plan calls for resoiling, coarse hard mine waste shall be leveled and covered with a layer of finer material or weathered waste. A soil layer shall then be placed on this prepared surface. Surface mines that did not salvage soil during their initial operation shall attempt, where feasible, to upgrade remaining native materials. The use of soil conditioners, mulches or imported topsoil shall be considered where revegetation is part of the Reclamation Plan and where such measures appear necessary. It is not justified, however, to denude adjacent areas of their soil, for any such denuded areas must in turn be reclaimed.
11. **Revegetation.** Before final revegetation is undertaken, the operator shall make use of the available research addressing revegetation methods and the selection of species having good survival characteristics, for the topography, resoiling

characteristics and the climate of the area. Native species are recommended wherever practicable. Reclamation Plans may also include development of screens and roadside plantings at mines currently in operation, where such screens and plantings are practical and desirable.

AGREEMENT REQUIRED PURSUANT TO CALIFORNIA SURFACE MINING AND RECLAMATION ACT OF 1975

No surface mining shall be conducted pursuant to a Major Use Permit or pursuant to vested nonconforming rights unless prior to the commencement of grading an agreement has been entered into allowing the County enter the property to correct any landscaping or irrigation system deficiencies, any unsafe condition, or breach of provisions of the Major Use Permit and/or Reclamation Plan. The agreement shall specifically authorize the County or any person authorized by it to enter the property at reasonable times for inspection or for the purpose of correcting any unsafe conditions resulting from the breach of any provision of the Major Use Permit or Reclamation Plan. Said agreement shall be executed by the permittee, the owner of the property and by holders, except government entities, of any lien upon the property which could ripen into a fee. The permittee shall provide acceptable evidence of title showing all existing legal and equitable interests in the property. The Director of Planning and Land Use is hereby authorized to execute and accept the agreement on behalf of the County of San Diego. The agreement shall be recorded prior to the commencement of grading pursuant to a Special Use Permit or Reclamation Plan.

If directed by the Planning Commission or the Board of Supervisors upon the recommendation of the Director of Planning and Land Use, the agreement required by this section shall be secured by security in an amount set by the Planning Commission or Board of Supervisors to assure compliance with the agreement. Such security shall be posted with the Director of Planning and Land Use and may be (a) a bond or bonds by one or more duly authorized corporate securities, or (b) a deposit of money or negotiable bonds of the kind approved for securing deposits of public monies, or (c) and instrument of credit from one or more financial institutions subject to regulation by the State or Federal Government and pledging that the funds necessary to carry out the plan are on deposit and guaranteed for payment, or (d) such other security at the option of the mining operator as is acceptable to the Director of Planning and Land Use and the County Counsel.

Said security instrument shall provide that in the event suit is brought by the County and judgment recovered, the surety shall pay in addition to the above specified sum all costs incurred by the County in such suit including a reasonable attorney's fee to be fixed by the court.

The security shall be in a form approved by the County Counsel and in an amount equal to 100 percent of the estimated cost of the work as determined by the Director of Planning and Land Use as necessary to restore the property to a condition which will not constitute a danger to the public health or safety and which will substantially conform to the approved Reclamation Plan, but not to exceed \$20,000; provided, however, that in no event shall the limitation on the amount of security required be construed as limitation on the liability of the permittee.

The permittee and the surety executing such bond or person issuing such instrument of credit or making such cash deposit shall continue to be firmly bound under a continuing obligation for the payment of all necessary costs and expenses that may be incurred by expended by the County in causing any and all such work to be done. In the case of a cash deposit, any unused portion thereof shall be refunded to the permittee.

- SEE ATTACHMENT BELOW -

Example Reclamation Plan



COUNTY OF SAN DIEGO
DEPARTMENT OF PLANNING AND LAND USE: Zoning
Example Reclamation Plan

*Conforms to the California Surface Mining and Reclamation Act (PRC 2700 et. sec.) and
Sections 1810 and 6550-6556 of the County of San Diego Zoning Ordinance*

ABC Rock Quarry

California Mine ID # XX-XX-XXX

[Community], California

APN XXX-XXX-XX

Submitted to:

County of San Diego
Department of Planning and Land Use
5201 Ruffin Road, Suite B

San Diego CA 92123

Submitted by:
[Applicant Name]

[Address]

[City, State, Zip]

Submitted [Date]

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7. FINAL CROSS SECTIONS AND NOTES
8. REVEGETATION SITE PLAN

APPLICANT:

[Name]
[Address]
[City, State, Zip]

AGENT:

[Name]
[Address]
[City, State, Zip]
[Telephone number]
[e-mail address]

REGISTERED GEOLOGIST:

[Name]
[Address]
[City, State, Zip]
[Telephone number]

REGISTERED ENGINEER:

[Name]
[Address]
[City, State, Zip]
[Telephone number]

1.0 PROJECT INFORMATION

1.1 Site Information

<u>Site Information</u>	
General Plan Designation	<i>Example: Rural Development Area, (25) Extractive, 20-acre minimum parcel size.</i>
Zoning District, Ordinance	<i>Example: S82 (Extractive)</i>
Site Size	Mine site: _____ acres Access Road: _____ acres (APN XXX-XXX-XX).
Current Use & Development	<i>Example: Agriculture (orchards) with single family dwelling.</i>
Surrounding Uses/Zoning	North: South: East: West:
Access	<i>Example: Private access road off of State Highway 78</i>
Public Services	Power: <i>Example: San Diego Gas & Electric</i> Water Supply: <i>Example: Private well for non-drinking use, bottled water for staff</i> Sewage: <i>Onsite septic system.</i> Fire: <i>Example: North County FPD</i>

1.2 SITE LOCATION AND ACCESS

Example:

*The proposed ABC Rock Quarry and associated operations area would be located in the _____ area on a portion of Assessor's Parcel #XXX-XXX-XX. The project site is also described as part of Section __, Township __ South, Range __ West, SBB&M. The site is approximately _____ miles east of U.S. Highway 15 in the _____ Planning Area. (see **Figure 1, Vicinity Map**).*

*Access to ABC Rock Quarry is provided by a gated private access road off of Highway _____ near the _____ mile marker. This access road and gate are also used by members of the public who reside in the _____ subdivision. (see **Figure 2, Location Map, and Appendix 1-Sheets 1-7**).*

1.3 BACKGROUND INFORMATION

[Discuss the history of any previous mining and reclamation activities on the site. Also, provide any other information pertinent to the review of the current application.]

[Insert] Figure 1: Vicinity Map (Location of proposed mining site relative to major highways.)

[Insert] Figure 2: Location Map (Detailed map of proposed mining site and immediate area.)

[Insert] Figure 3: Aerial photograph

1.4 EXISTING LAND USE

[Describe the existing use of the parcels involved with the proposed mining and reclamation project.]

1.5 PROJECT DESCRIPTION

[This project description shall be prepared for use in both this Reclamation Plan application and in the concurrent Major Use Permit application required to authorize the proposed mining activities.]

Example:

The applicant requests the granting of a Major Use Permit (MUP) and the approval of a Reclamation Plan to authorize the extraction (mining) of _____ tons of construction aggregate and the reclamation of the mined lands (i.e. the areas disturbed by mining activities).

The requested MUP would authorize a production limit of _____ tons per year based on a five-year rolling average (or _____ tons in any consecutive 5 calendar years). A maximum annual production of _____ tons in any calendar year is proposed. Total material production from the site is estimated to be _____ million tons (_____ cubic yards). Operations would occur on weekdays between the hours of 7:00am to 7:00pm. Mining would occur over a _____-acre area with a maximum depth of excavation of _____ feet.

At the proposed average mining rate of _____ tons per year, mining of the _____ million tons of material would require approximately _____ years (i.e. to the year 20____). Thus the proposed end of mine life is approximately December 31, 20____.

As reflected in the enclosed reclamation plan maps and sections, the mine site would be reclaimed to a condition suitable for an alternate end use as _____. Reclamation of the site would occur in _____ phases such that the acreage under active excavation at any one time would be minimized. The final reclaimed surface would be characterized by a near-level quarry floor with an adjacent excavated slope. The slope would be a maximum of 2:1 gradient with intervening 10-foot wide benches placed every 50 feet of elevation. The mined lands would be re-vegetated with native species compatible with the surrounding area. Site drainage would be directed to sedimentation basins to minimize the offsite transport of eroded material while the vegetation is established.

2.0 OPERATIONS PLAN

2.1 PRODUCTION QUANTITIES AND TYPE OF MINERALS

Example:

*This application reflects a proposal to mine approximately ____ million tons of material within the requested MUP boundary. Given the proposed mining rate of ____ tpy, and assuming permit approvals in early 20____, this ____ million ton reserve would have an expected mine life of approximately ____ years, or until the year 20____. A table of estimated mine production under the proposed MUP is included in **Table 2.** below.*

Under the proposed plan of operations revision, ABC Rock Quarry would produce an average of ____ tons of rip-rap, and crushed limestone products per year through the year 20____. The operator also proposes the use of a rolling five-year average to allow for production flexibility to meet market demand by totaling ____ million tons in any consecutive 5-year period. A maximum total of ____ tons could be mined in any calendar year.

3.0 CONFORMANCE WITH RECLAMATION REGULATIONS

The following section describes the conformance of the proposed Reclamation Plan with the requirements of Section 87.705 of the County Grading Ordinance, Section 6556 of the County Zoning Ordinance and the California Surface Mining and Reclamation Act (PRC Section 2710 et. seq.).

3.1 Section 87.705(d) of the County Grading Ordinance:

The Reclamation Plan shall contain all matters required by SMARA and Sections 3502 and 3700 and following of Title 14 of the California Code of Regulations, and shall provide in designated phases for the progressive rehabilitation of the mining site land form so that, when reclamation is complete, it will contain stable slopes, be readily adaptable for alternate land uses, and be free of derelict machinery, waste materials and scrap to the satisfaction of the County Official. The proposed mining site land form, to the extent reasonable and practical, shall be revegetated for soil stabilization, free of drainage problems, coordinated with present and anticipated future land use, and compatible with the topography and general environment of surrounding property.

Conformance of this proposed Reclamation Plan with each of the above-listed standards is described below:

Progressive rehabilitation of the mining site land form

[Describe the phasing of excavation and site reclamation with reference to the enclosed maps and cross sections. Include a list of phases that are marked on Reclamation Plan maps, a Table of proposed phase completion dates, and a table of estimated production as shown in examples below.]

Example language:

Phase I – Initial active mine area (mining complete in 2017)

Phase II – Future mine area (mining complete in 2027)

Phase III – future mine area (mining complete in 2033)

Phase IV – future mine area (mining complete in 2043)

Table 1 - Proposed Mining and Reclamation Completion Dates

Project Phase	Project Area (acres)	Estimated Date of Completion of Mining	Estimated Date of Completion of Reclamation
I	28.5	2017	2025
II	28.5	2027	2035
III	31.5	2033	2046*
IV	31.5	2043	2046*

Note: * indicates dates that include a three year monitoring period for evaluation of reclamation success.

TABLE 2. MATERIAL PRODUCTION (Example for 2003 mine expansion)

	TOTAL MATERIAL PRODUCED (TONS)	TOTAL MATERIAL PRODUCED (CUBIC YDS)*	YEAR	TOTAL MATERIAL PRODUCED (TONS)	TOTAL MATERIAL PRODUCED (CUBIC YDS)*
1997	485,845	285,791	2024	300,000	229,000
1998	415,323	244,308	2025	300,000	229,000
1999	297,041	174,730	2026	300,000	229,000
2000	261,391	153,759	2027	300,000	229,000
2001	261,682	153,931	2028	300,000	229,000
2002	246,895	145,232	2029	300,000	229,000
2003	239,421	140,836	2030	300,000	229,000
2004	300,000	229,000	2031	300,000	229,000
2005	300,000	229,000	2032	300,000	229,000
2006	300,000	229,000	2033	300,000	229,000
2007	300,000	229,000	2034	300,000	229,000
2008	300,000	229,000	2035	300,000	229,000
2009	300,000	229,000	2036	300,000	229,000
2010	300,000	229,000	2037	300,000	229,000
2011	300,000	229,000	2038	300,000	229,000
2012	300,000	229,000	2039	300,000	229,000
2013	300,000	229,000	2040	300,000	229,000
2014	300,000	229,000	2041	300,000	229,000
2015	300,000	229,000	2042	300,000	229,000
2016	300,000	229,000	2043	300,000	229,000
2017	300,000	229,000			
2018	300,000	229,000			
2019	300,000	229,000			

2020	300,000	229,000			
2021	300,000	229,000			
2022	300,000	229,000			
2023	300,000	229,000			

Stable slopes

[Describe the geometry of the slopes that are proposed to be in place at the end of each intermediate phase and the slopes that would be included in the final reclaimed surface. Summarize the documentation provided to demonstrate that the proposed slopes would meet established standards of stability (i.e. FS = 1.5).]

Site readily adaptable for alternate land use

[Describe the suitability of the final reclaimed surface for alternate end uses. The proposed alternate end use(s) should be described here.]

Free of derelict machinery, waste materials and scrap

[Describe the proposed disposition of machinery at the time of final reclamation.]

Revegetation for soil stabilization

[Reference the revegetation plan described in later sections of this Reclamation Plan.]

Free of drainage problems

[Describe the drainage control measures to be installed as part of final reclamation. Discuss the compliance of these measures with applicable stormwater regulations.]

Compatible with the topography and general environment of surrounding property

[Discuss the conformance of the final reclaimed surface configuration and vegetative cover with the surrounding undisturbed lands.]

3.4 *CONSISTENCY WITH THE RECLAMATION STANDARDS OF THE CALIFORNIA SURFACE MINING AND RECLAMATION ACT*

3.4.1 Past reclamation activities:

[In the case of a mine expansion proposal, describe the reclamation efforts that have been completed to date.]

3.4.2 Proposed future reclamation activities:

The following sections provide a discussion of the compliance of the proposed reclamation plan with applicable State reclamation regulations and standards pursuant to the Surface Mining and Reclamation Act (SMARA).

3.4.3 SURFACE MINING AND RECLAMATION ACT OF 1975 - SECTION 2773.1, FINANCIAL ASSURANCES

[Include the following language in this section.]

The Financial Assurance amount for reclamation of the proposed facility, based on this Reclamation Plan, will be determined upon plan approval in compliance with SMARA and other applicable regulations. The amount of financial assurance by bond, letter of credit or other method will be assessed annually by the County of San Diego based on the cost to reclaim existing disturbed areas and the areas anticipated to be disturbed in the succeeding year.

3.4.4 STATE MINING AND GEOLOGY BOARD RECLAMATION REGULATIONS - SECTIONS 3502

3.4.4.1 The Reclamation Plan, (b) Reclamation Plan Elements

(A) The Environmental Setting Of The Site Of Operations And The Effect That Possible Alternate Reclaimed Site Conditions May Have Upon The Existing And Future Uses Of Surrounding Lands.

Environmental Setting: [Describe the location and environmental conditions of the proposed mining site and surrounding area. This description must include a report prepared by a licensed Geologist that describes the geologic conditions that underlie the site.]

Effects: [Describe any potential effect that the configuration and condition of the final reclaimed surface would have on lands in the vicinity of the mining site. Potential offsite physical effects of reclamation, any restrictions on road access, and the compatibility of the proposed final condition of the mining site with the surrounding area should be discussed.]

(B) The Public Health and Safety, Giving Consideration to the Degree and Type of Present and Probable Future Exposure Of The Public to the Site.

[Describe the measures proposed to assure safe conditions at the mining site.]

Example language:

During the proposed mining and reclamation activities, the locked gate to the project site located near Highway 78 will remain to discourage unauthorized access. All mining and backfill sites will comply with all Federal (MSHA) and State (OSHA) mine safety regulations concerning operating standards and operation of equipment. Workers, including contract labor, are trained in mine safety and first aid. Refresher courses are conducted periodically in accordance with applicable regulations.

Mine operators carry portable cellular phones for off-site communication. All visitors, outside vendors and truck drivers are required to check in and check out with the scale weigh master. Conditions affecting safety are continually monitored by a dedicated safety coordinator based out of the operations office.

ABC Ranch is private property, and after reclamation of ABC Rock Quarry is completed, as well as during the interim while mining operations continue, the general public will not be admitted to these lands.

When mining has concluded and reclamation has been completed, there will be no open shafts or any hazardous materials present on these lands

- (C) The Designed Steepness And Proposed Treatment Of The Mined Land's Final Slopes Shall Take Into Consideration The Physical Properties Of The Slope Material, Its Probable Maximum Water Content, Landscaping Requirements, And Other Factors. In All Cases, Reclamation Plans Shall Specify Slope Angles Flatter Than The Critical Gradient For The Type Of Material Involved. Whenever Final Slopes Approach The Critical Gradient For The Type Of Material Involved, Regulatory Agencies Shall Require An Engineering Analysis Of The Slope Stability. Special Emphasis On Slope Stability And Design Shall Be Necessary When Public Safety Or Adjacent Property May Be Affected.**

[Describe the geometry of the slopes that are proposed to be in place at the end of each intermediate phase and the slopes that would be included in the final reclaimed surface. Summarize the documentation provided to demonstrate that the proposed slopes would meet established standards of stability (i.e. FS = 1.5).]

- (D) Areas Mined To Produce Additional Materials For Backfilling And Grading, As Well As Settlement Of Filled Areas, Shall Be Considered In The Reclamation Plan. Where Ultimate Site Uses Include Roads, Building Sites, Or Other Improvements Sensitive To Settlement, The Reclamation Plans Shall Include Compaction Of The Fill Materials In Conformance With Good Engineering Practice.**

[The proposed final configuration of any fill slopes or other accumulation of fill should be described. Summarize the documentation that demonstrates the slopes would meet established standards of stability (i.e. FS = 1.5). Where proposed to support development, compliance with the "Design Standards and Performance Requirements" of the County Grading Ordinance must be demonstrated.]

- (E) Disposition of Old Equipment.**

[Describe the final disposition of the equipment and structures used as part of the mining operation.]

Example language:

When mining activities cease, all mobile and processing equipment not required for reclamation will be removed from the site. All buildings and fixtures not included in the final approved reclamation plan will be removed. Ground water wells, water pipelines and related utilities useful to grazing and future agricultural production will be left in place.

3.4.5 SURFACE MINING AND RECLAMATION ACT OF 1975 REGULATIONS, ARTICLE 9, RECLAMATION STANDARDS

The following sections provide discussions of the compliance of the proposed Reclamation Plan with the applicable provisions of SMARA Regulations, Article 9, Reclamation Standards.

3.4.5.1 Section 3703 - Performance Standards for Wildlife Habitat

(a) Rare, Threatened or Endangered Species shall be conserved:

[Describe the occurrence of rare, threatened or endangered species on the proposed mining site. Also, discuss the effects of the proposed final reclaimed condition of the mining site on surrounding habitat areas. The conclusions of an assessment report prepared by a qualified biologist should be summarized.]

(b) Wildlife shall be established on disturbed land in a condition at least as good as that which existed before the lands were disturbed by surface mining operations:

[Describe the anticipated suitability for wildlife habitat of any areas designated in this Reclamation Plan for an open space end use.]

(c) Wetland Habitat shall be avoided. Any wetland habitat impacted as a consequence of surface mining operations shall be mitigated at a minimum of one to one ratio for wetland habitat acreage and wetland habitat value:

[Describe the extent of disturbance of wetlands due to mining or reclamation activities. The mitigation measures proposed to meet the above standard should also be described.]

3.4.5.2 Section 3704 - Performance Standards for Backfilling, Regrading, Slope Stability, and Recontouring

(a) Where backfilling is proposed for urban uses (e.g., roads, building sites, or other improvements subject to settlement), the fill material shall be compacted in accordance with Section 7010, Chapter 70 of the UBC, or the local grading ordinance:

[Describe the placement of mining waste or other fill material and the ultimate use of filled areas. Where urban improvements are included in the proposed end use, the design standards of Section 87-401 through 87.422 of the County Grading Ordinance should be listed and the method of compliance with each section described herein.]

(b) Where backfilling is required for resource conservation purposes, fill material shall be backfilled to the standards required for the resource conservation use involved:

[Describe the placement and character of fill intended for non-urban uses after the reclamation of the site. An example would be the replacement of topsoil for agricultural use.]

(c) Piles or dumps of mining waste shall be stockpiled in such a manner as to facilitate phased reclamation. They shall be segregated from topsoil, etc.:

[Describe the location and treatment of interim stockpiles of mining waste and topsoil. These separate temporary stockpiles should be placed in a manner consistent with the proposed phases of site reclamation. The reclamation plan maps that depict the stockpile locations should be referenced here.]

(d) Final reclaimed fill slopes shall not exceed 2:1 (horizontal to vertical), except with support of geologic and engineering analysis:

[Describe the geometry of the slopes that are proposed to be in place at the end of each intermediate phase and the slopes that would be included in the final reclaimed surface. Summarize the documentation that demonstrates the slopes meet established standards of stability (i.e. FS = 1.5).]

(e) At closure, all fill slopes, including permanent piles or dumps of mine waste and overburden, shall conform with the surrounding topography and/or approved end use:

[Discuss the conformance of the portions of the final reclaimed surface and vegetative cover proposed for an open space end use with the surrounding undisturbed lands. Describe the suitability of the other reclaimed mined lands with the proposed alternate end use.]

(f) Cut slopes, including final highwalls and quarry faces, shall have a minimum slope stability factor of safety that is suitable for the approved end use and conform with the surrounding topography and/or approved end use:

[Describe the geometry of the slopes that are proposed to be in place at the end of each intermediate phase and the slopes that would be included in the final reclaimed surface. Summarize the documentation that demonstrates the slopes meet established standards of stability (i.e. FS = 1.5). Discuss the conformance of the portions of the final reclaimed surface and vegetative cover proposed for an open space end use with the surrounding undisturbed lands. Describe the suitability of the other reclaimed mined lands with the proposed alternate end use.]

(g) Permanent placement of piles or dumps of mining waste and overburden shall not occur within wetlands, unless mitigation acceptable to the lead agency has been proposed to offset wetland impacts and/or losses:

[Describe the extent of disturbance of wetlands due to mining or reclamation activities and the mitigation measures proposed to meet the above standard.]

3.4.5.3 Section 3705 - Performance Standards for Revegetation

(a) Suitable Vegetative Cover shall be provided:

[Describe the character of the vegetative cover of the site prior to the onset of mining activities and summarize the components of the proposed re-vegetation plan. Placement of topsoil (salvaged and imported), installation of plants and seeding, the species list, and the habitat type to be created must be described in the plan. Performance standards for species richness and density shall be included here. The map sheet included in the Reclamation Plan that depicts the re-vegetation of the final reclaimed surface should be referenced.]

(b) Test Plots shall be provided:

[Describe the location, extent and monitoring of the test plots proposed to be used during the mining period. The map sheet that depicts the location(s) should be referenced.]

(c) Where surface mining activities result in compaction of the soil, ripping or disking shall be used in areas to be revegetated:

[Describe the areas disturbed by mining activities where the soil would potentially be compacted. (Note: Mine access roads commonly result in compacted soils.) Outline the method to be used to render the compacted soil suitable for re-vegetation.]

(d) Prior to closure, all access roads shall be stripped of road base materials:

[Describe the removal of road base materials as part of site reclamation. Reference the applicable section of the Reclamation Plan. List any paved roadways that would remain after site reclamation as part of the proposed alternate end use.]

(e) Soil analysis shall be required to determine the presence of essential elements for plant growth:

[Summarize the provisions included in the Reclamation Plan for the analysis of stockpiled or imported soils to determine the presence of essential elements for plant growth.]

(f) Temporary access for exploration shall not disrupt the soil surface except where necessary to gain safe access:

[Describe the treatment of temporary access roads to minimize erosion and the loss of topsoil.]

(g) Native species shall be used for revegetation:

[Describe the mixture of native plant species proposed for re-vegetation. Reference the applicable section of the Reclamation Plan (i.e. the applicable map sheets).]

(h) Planting shall be conducted during the most favorable period of the year:

Example language:

Seeding of the quarry slope surfaces will be conducted in October to December to coincide with the start of the annual wet season. Seed germination would be initiated by natural rainfall.

(i) Soil stabilizing practices shall be used where necessary to control erosion:

[Describe any methods, other than seeding, used to control erosion until vegetative cover has been established.]

(j) If irrigation is used, the operator must demonstrate that the vegetation has been self-sustaining without irrigation for a minimum of two years prior to release of financial assurances:

[Describe the documentation of compliance with this requirement that would be provided to the County at the time of final reclamation.]

(k) Noxious weeds shall be managed:

Example language:

Weeds (i.e. invasive, non-native species) would be eradicated in the reclamation area during mine operation and as part of interim and final reclamation of the site. consistent with established agricultural practices. Invasive weeds shall be eradicated.

(l) Protection measures, such as fencing of vegetated areas, shall be used where needed to protect from grazing, trampling, etc.:

[Describe the protective measures to be used for the test plots and areas undergoing reclamation. These measures should remain in place until the vegetative cover of mined lands is established.]

(m) Success of revegetation shall be judged based upon the effectiveness of the vegetation for the approved end use.....:

Example language:

Monitoring of test plot re-vegetation would be conducted during the mining period to insure the success of the plantings.

Inspections with County personnel will be conducted at least annually as required by SMARA and the reclamation monitoring plan. Corrections will be made as necessary based on criteria in Section (b) above.

3.4.5.4 Section 3706 - Performance Standards for Drainage, Diversion Structures, Waterways and Erosion Control

(a) Surface mining and reclamation activities shall be conducted to protect on-site and downstream beneficial uses:

Example language:

The Storm Water Pollution Prevention Plan and the annual implementation of Best Management Practices would prevent substantial effects on down stream resources and users.

(b) The quality of water, recharge potential, and storage capacity of groundwater aquifers shall not be diminished:

[Describe the effect of mining and the establishment of the final reclaimed surface on the potential recharge and storage capacity of groundwater aquifers. Also, describe any potential effects on surface and groundwater quality. Reference the geologic report included in the Reclamation Plan.]

Example language:

Mining of the mineral reserve and establishment of the final reclamation surface would not reduce recharge potential or the storage capacity of ground water aquifers.

Potential ground water quality impacts from fuels and lubricants will be minimized by the use a very small mobile equipment fleet in the mine area, storage of equipment away from the stream course, and regular maintenance of that equipment to limit potential releases of fuels or

lubricants from that equipment. No hazardous materials will be stored on site unless provided secondary containment.

(c) Erosion and sedimentation shall be controlled:

Example language:

Implementation of best management practices pursuant to the SWPPP shall control erosion and sedimentation (refer to Section 3706(a) above).

(d) Surface runoff and drainage from surface mining operations shall be controlled:

See Section 3706(a) above

(f) When stream diversions are required, they shall be constructed in accordance with the stream and lake alteration agreement between the operator and State Department of Fish and Game; and the requirements of the Federal Clean Water Act:

[Any necessary agreement with State or Federal agencies should be referenced here and included in the Reclamation Plan.]

(g) When no longer needed, stream diversions shall be removed:

[Describe any flow control structures that would be utilized as part of the mining operation and the criteria for their removal as part of site reclamation.]

**3.4.5.5 Section 3707 – Performance Standards for Prime Agricultural Land Reclamation.
In addition to the standards for topsoil salvage, maintenance and redistribution, the following standards shall apply to mining operations on prime agricultural lands where the end use is agriculture:**

a. Mining operations which will operate on prime agricultural lands, as defined by the U.S. Soil Conservation Service (Natural Resources Conservation Service), shall return all disturbed areas to a fertility level as specified in the approved reclamation plan.

[Describe the extent of prime agricultural lands within the proposed footprint of disturbance. Summarize the methods incorporated into the Reclamation Plan for returning such lands to a fertile and productive condition.]

b. When distinct soil horizons are present, topsoil shall be salvaged and segregated by defined A, B, and C soil horizons. Upon reconstruction of the soil, the sequence of horizons shall have the A atop the B, the B atop the C, and the C atop the graded overburden.

[Describe the character of the onsite soil accumulation and proposed salvage methods to be used in conformance with this requirement.]

c. Reclamation shall be deemed complete when productive capability of the affected land is equivalent to or exceeds, for two consecutive crop years, that of the premining condition or similar crop production in the area. Productivity rates, based on reference areas described in the approved reclamation plan, shall be specified in the approved reclamation plan

[Describe the proposed “productivity rate” performance standard for the reclamation of the agricultural land.]

d. Use of fertilizers or other soil amendments shall not cause contamination of surface or ground water. Note: Authority cited: Sections 2755, 2756 and 2773, Public Resources Code. Reference 2772, Public Resources Code.

[Describe the use of fertilizers and other soil amendments.]

Example language:

Use of fertilizers or other soil amendments in the proposed project area will be limited to types and application rates consistent with applicable regulations.

3.4.5.6 Section 3708 - Performance Standards related to Other Agricultural Lands

Example language: Reclamation performance standards will include success criteria as described in the revegetation plan (see Plate 10-11).

3.4.5.7 Section 3709 - Performance Standards for Building, Structure and Equipment Removal

(a) All equipment, supplies and other materials shall be stored in designated areas:

Example language: All equipment and materials on the proposed project site would be stored in areas and structures designated for such uses.

(b) All buildings, structures and equipment shall be dismantled and removed prior to final mine closure, except as necessary for the end use.

Example language: All buildings, structures and equipment shall be removed, with the exception of water wells and power lines which will serve the ranch after reclamation activities have been concluded.

3.4.5.8 Section 3710 - Performance Standards for Stream Protection, including Surface and Groundwater

(a) Surface and groundwater shall be protected from pollutants:

[Describe the measures incorporated into the project to avoid the contamination of water resources.]

Example language:

Diesel fuel and oils are used onsite for operating equipment. Fuels and lubricants are not stored on site; instead, a mobile fuel and lubricant service vehicle serves the equipment. All waste oil generated at the project site is collected and transported for off-site disposal by properly trained and licensed personnel. This procedure will continue throughout this project life.

(b) In-stream surface mining operations shall be conducted in compliance with Section 1600 et seq. of the California Fish and Game Code, Section 404 of the Clean Water Act, and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

[Describe the compliance of the proposed mining activities with these State and Federal laws. List the permits required from each agency.]

(c) Extraction of sand and gravel from river channels shall be regulated to control channel degradation in order to prevent undermining of bridge supports, exposure of pipelines or other structures buried within the channel, loss of spawning habitat, lowering of groundwater levels, destruction of riparian vegetation, and increased streambank erosion (exceptions may be specified in the approved reclamation plan). Changes in channel elevations and bank erosion shall be evaluated annually using records of annual extraction quantities and benchmarked annual cross sections and/or sequential aerial photographs to determine appropriate extraction locations and rates.

[Refer to discussion under 3710b above regarding the permits required to authorize in-stream mining. Describe how the adverse effects listed in Section 3710c would be avoided and how ongoing monitoring would be accomplished.]

(d) In accordance with the requirements of the California Fish and Game Code section 1600 et seq., in-stream mining activities shall not cause fish to become entrapped in pools or in off-channel pits, nor shall they restrict spawning or migratory activities.

[Describe the measures included in the Reclamation Plan to avoid the entrapment of fish or effects on migration.]

3.4.5.8 Section 3711 - Performance Standards for Topsoil Salvage

(a) All salvageable topsoil suitable for revegetation shall be removed as a separate layer from mining area. Topsoil removal shall not precede mining activities by more than one year without approval:

[Describe the method used to collect topsoil for future reclamation.]

(b) Topsoil resources shall be mapped prior to stripping and the location of topsoil stockpiles shall be shown on the reclamation plan:

[Describe the proposed method of documenting the available topsoil resources. Reference a Reclamation Plan map sheet that depicts the location of the topsoil stockpiles.]

(c) Soil salvage operations and phases of reclamation shall be carried out in accordance with a schedule that : 1) is set forth in the approved reclamation plan; 2) minimizes the area disturbed; and 3) is designed to achieve maximum revegetation success:

[Describe the phasing of excavation and site reclamation with reference to the enclosed maps and cross sections. Include a list of phases that are marked on Reclamation Plan maps, a Table of proposed phase completion dates, and a table of estimated production. Refer to Section 3.1 above]

(d) Topsoil and suitable growth media shall be used to phase reclamation as soon as can be accommodated by the mining schedule presented in the approved reclamation plan following the mining of an area. Topsoil that cannot be used immediately should be stockpiled where it will not be disturbed. Topsoil shall be clearly identified to distinguish it from mine waste. Protect stockpiles from erosion and weed growth. Relocation of topsoil stockpiles must be approved:

[Describe the methods used to protect the topsoil stockpiles.]

Example language:

The encountered topsoil will be stockpiled near areas to be reclaimed and left undisturbed until its use is required. The stockpile will be seeded with native erosion control seed mix to prevent erosion. No mine waste will be placed on or adjacent to the topsoil stockpiles.

(e) Topsoil and growth media shall be redistributed in a manner that results in a stable, uniform thickness consistent with the approved end use, site configuration and drainage:

[Refer to the Re-vegetation Plan included in the Reclamation Plan.]

3.4.5.9 Section 3712 - Performance Standards for Tailing and Mine Waste Management

State Water Resources Control Board mine waste disposal regulations in Article 7 of Chapter 15 of title 23, California Code of Regulations, shall govern mine waste and tailings and mine waste disposal units shall be reclaimed in conformance with this article:

[Describe the final placement of mining waste and reference the relevant Reclamation Plan map sheets.]

3.4.5.10 Section 22470: SWRCB - Applicability

This article applies to all discharges of mining waste.

[Describe the applicability of these regulations to the proposed disposal of mining waste or describe why the project is exempt from these regulations. Section 22470 lists the eligible exemptions.]

3.4.5.11 Section 22480: SWRCB - Groups of Mining Waste

(a) Definition:

Mining waste is waste from the mining and processing of ores and mineral commodities. Mining waste includes:

- 1. overburden:**
- 2. Natural geologic material which have been removed or relocated but have not been processed (waste rock): and**
- 3. the solid residues, sludges, and liquids from the processing of ores and mineral commodities.**

(b, c) Waste Group Classification:

[Classify the mining waste in accordance with the criteria listed in 27 CCR 480.]

(d) Treatment:

[Describe any proposed treatment of the mining waste that would occur as part of disposal.]

3.4.5.12 Section 22490: SWRCB - Mining Unit Siting and Construction Standards

(a) Proximity to Faults - New Mining Units

1. Holocene Faults:

[Describe any active or potentially active faults in the vicinity of the proposed waste fills. Such fills shall not be located on a Holocene fault.]

2. Areas of Rapid Geologic Change:

[Describe any areas, such as landslides, that are subject to rapid geologic change. Waste fills shall be located outside such areas.]

(b) Flooding - All mining units shall be protected from flooding as shown on Table 1.2 of the Section 22490 SWQCB regulations.

[Describe the measures that would be implemented to meet the standards included in these regulations.]

(c) Construction and Discharge standards.

[Describe the measures that would be implemented to meet the standards included in these regulations.]

(d) Registered Professionals.

Example language:

Containment structures shall be designed by a registered civil engineer. Construction shall be supervised and certified by a registered civil engineer or certified engineering geologist.

(e) General Containment Structure Criteria.

[Describe the measures that would be implemented to meet the standards included in these regulations.]

(f) Liners

[Describe the measures that would be implemented to meet the standards included in these regulations.]

(g) Leachate Collection and Removal Systems.

[Describe the measures that would be implemented to meet the standards included in these regulations.]

(h, i) Precipitation and Drainage Controls; Design Storm:

[Describe the measures that would be implemented to meet the standards included in these regulations.]

3.4.5.13 Section 22510 - Closure and Post-Closure Maintenance of Mining Units

(a) Closure Performance Standard:

[Describe the measures that would be implemented to meet the standards included in these regulations.]

Example language:

The reclamation plan includes the incorporation of permanent sediment control measures including grading, installation of check dams on the mine floor, drainage and limited revegetation of the proposed mine site. The reclaimed land would also meet applicable State and County standards for stability. These measures would avoid substantial erosion of the final reclaimed slopes and preclude the potential for substantial sedimentation of nearby streams.

(b) Plan:

Example language:

Upon approval, this Reclamation Plan would fulfill the requirements of this section.

(c) Reclamation:

[Describe the measures that are proposed as Waste Discharge Requirements (WDRs) issued by the RWQCB.]

(d) Oversight and Monuments:

[Describe the measures that would be implemented to meet the standards, including closure supervision and monuments, listed in Section 20950b&d of the SWRCB regulations.]

(e) Inactive Units:

Containment structures at inactive Mining Units shall be subject to the same standards as apply to an active Mining Unit.

[This requirement should be acknowledged.]

(f, g) Financial Assurance:

Example language:

The operator's financial assurance to be established under SMARA for this reclamation plan will be adequate to comply with any and all closure and post-closure maintenance requirements as verified by County and State Office of Mine Reclamation staff.

A current reclamation bond, in the amount of _____ is already in place.

(h) Ending Post-Closure:

Example language:

Post closure monitoring will be ended upon achievement of the revegetation success criteria and release of the reclamation bond.

(i) Vegetation:

Example language:

Revegetation of the proposed project site will not impair the integrity of any of the containment features provided for site reclamation. No irrigation of vegetation is proposed.

(j) Waste Pile Closure Standards.

(k) Surface Impoundment Closure Standards.

(l) Tailings Pond Closure Standards.

[Describe the measures that would be implemented to meet the standards included in these regulations.]

(m) Erosion and Sedimentation Protection:

Example language:

The erosion, sedimentation control and revegetation features of the proposed reclamation plan are designed to minimize erosion and the threat of water quality degradation from sedimentation.

3.4.5.14 Section 3713 - Performance Standards for Closure of Surface Openings

- (a) Except those used solely for blasting or those that will be mined through within one year, all drill holes, water holes, water wells, and monitoring wells shall be completed or abandoned in accordance with each of the following: (1) Water Code sections 13700, et seq. and 13800, et seq.; (2) the applicable local ordinance adopted pursuant to Water Code section 13803; (3) the applicable Department of Water Resources report issued pursuant of Water Code section 13800; and (4) Subdivisions (1) and (2) or section 2511(g) of Chapter 15 of Title 23 regarding discharge of waste to land:**

[Describe the measures that would be implemented to meet the standards included in these regulations.]

- (b) Prior to closure, all portals, shafts, tunnels, or other surface openings to underground workings shall be gated or otherwise protected from public entry to protect the public and wildlife:

[Describe the measures that would be implemented to meet the standards included in these regulations.]

Example language:

No underground workings exist nor are they planned at the proposed project site. The main access road to the project site will remain protected with a locked gate.

3.5 CLEAN WATER ACT (1972) APPLICABILITY

The Federal Water Pollution Control Act as amended by the Clean Water Act of 1977 (hereafter Act, 33 U.S.C 1251 et. seq.) established national goals for controlling and reducing pollution in the nation's waters. Two of these goals specifically pertain to the reclamation plan for the proposed project.

"It is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983" (33 U.S.C. 1251).

"It is the national policy that programs for the control of nonpoint sources of pollution be developed and implemented in an expeditious manner so as to enable the goals of this Act to be met through the control of both point and nonpoint sources of pollution" (33 U.S.C. 1251 (a)(7)).

Regulations promulgated in various sections of the Act (Section 402 and Section 404) serve to cover discharges into waters of the United States, and to monitor the conditions of the nation's waters.

3.5.1 Section 402 (40 CFR Part 122) of the Act provides for the National Pollutant Discharge Elimination System (NPDES) regulatory permit program. Under this permitting program, the U.S. Environmental Protection Agency regulates stormwater discharges for point and nonpoint sources of pollution; including stormwater discharges that violate water quality standards or that significantly contribute pollutants to U.S. waters. Under the NPDES program, any person responsible for the discharge of a pollutant or pollutants into any waters of the U.S. from any point source must apply for and obtain a permit. The authority to issue NPDES permits may be delegated to the States by the U.S. EPA, as is the case in California.

Section 402 defines pollution as "...man-made or man-induced alteration of chemical, physical, biological, and radiological integrity of water" (Clean Water Act 1987). Statutory examples of point sources of pollution include runoff and drainage water from active mines. Diffuse or nonpoint sources of pollution include sources that are diffuse in nature and which are not discharged from a few localized points. Statutory nonpoint sources of pollution include land-disturbing activities. Principal pollutants of concern include chemical inputs, gaseous emissions, heavy metals, acid rain, and sediment.

[Describe the compliance of the project with applicable regulations.]

Example language:

ABC Rock Quarry currently operates under an NPDES Industrial Activities general storm water discharge permit WDID No. 3 400012692

3.5.2 Waters of the U.S. are defined at 33 CFR Part 328. Although this section of the Code of Federal Regulations defines the term “waters of the U.S.” as it applies to the jurisdictional limits of the authority of the Corps of Engineers under Section 404 of the Act, these definitions are applicable to regulations promulgated under Section 402. The term “waters of the U.S.” includes:

- a. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate commerce, including all waters that are subject to the ebb and flow of the tide.
- b. All interstate waters including interstate wetlands.
- c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
 - i. which are or could be used by interstate or foreign travelers for recreational or other purposes; or
 - ii. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce;
 - iii. which are used or could be used for industrial purpose by industries in interstate commerce.
- d. All impoundments of waters otherwise defined as waters of the U.S. under the definition.
- e. Tributaries of waters identified above.
- f. The territorial seas.
- g. Wetlands adjacent to waters.

Section 404 (33 CFR Part 320-330) enables the U.S. Army Corps of Engineers in the Department of the Army to issue permits for the discharge of dredged or fill material into waters of the U.S. at specific sites. The term “discharge of fill material” means the addition of fill material into waters of the U.S. The term “fill material” means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a waterbody (33 CFR Part 323.2 (f)). The term does not include any pollutant discharged into the water primarily to dispose of waste as that activity is regulated under Section 402 of the Act (33 CFR Part 323.2 (e)).

[Describe the compliance of the project with applicable regulations.]

Example language:

The proposed project does not include any disturbance of jurisdictional waters. Previous consultation with the US Army Corps of Engineers and the California Department of Fish and Game was conducted to design and implement the existing drainage and sediment control plan.

3.6 PORTER-COLOGNE WATER POLLUTION CONTROL ACT APPLICABILITY

[Describe the compliance of the project with applicable regulations.]

PLATES (RECLAMATION PLAN MAP SHEETS)

Listed below are the plates or map sheets required as part of a Reclamation Plan.

1. TITLE SHEET

[This sheet would include operator contact information, a vicinity map and index to the remaining reclamation plan maps and cross sections.]

2. EXISTING FACILITIES AND AREAS AFFECTED BY MINING

[In the case of a mine expansion, this sheet would depict the existing mining facilities and disturbed areas. The base map used would be the current topographic map of the site.]

3. PHASED OPERATION PLAN(S)

[This map sheet(s) would constitute an engineered excavation or grading plan and depict the current topographic contours of the mining site and the proposed topography at the end of each proposed phase of mining. The volume and tonnage of material extracted would be listed on the sheet and be consistent with the figures included in Section 3.0 of the Reclamation Plan text.]

4. PHASE I AND II CROSS SECTIONS

[These cross sections would describe the proposed topography of the mining site at the end of the first two phases of mining. Each cross section would show the original (pre-mining) ground surface and the surface to remain after completion of each phase. The surfaces depicted must be consistent with the topographic contours shown on the Phased Operation Plans listed as Item 3 above]

5. PHASE III AND IV CROSS SECTIONS

[For a project involving four phases, these cross sections would describe the proposed topography of the mining site at the end of the third and fourth phases of mining. Each cross section would show the original (pre-mining) ground surface and the surface to remain after completion of each phase. The surfaces depicted must be consistent with the topographic contours shown on the Phased Operation Plans listed as Item 3 above The Phase IV cross sections would be similar to the final cross sections but may not describe the final placement of fills.]

6. FINAL RECLAMATION SITE PLAN

[This map sheet(s) would constitute an engineered excavation or grading plan and depict the configuration of the final reclaimed surface of the mining site. This map must include the following features:

- a. The proposed topographic contours of the site at the end of mining. These contours must describe the final placement of mining waste.
- b. The current (pre-mining) topographic contours.
- c. All final drainage features and facilities.
- d. The lines of all cross sections.
- e. A graphic bar scale and north arrow.
- f. The signature and stamp of the registered civil engineer responsible for preparation of the plans. The volume and tonnage of material extracted would be listed on the sheet and be consistent with the figures included in Section 3.0 of the Reclamation Plan text.]

7. FINAL CROSS SECTIONS AND NOTES

[These cross sections would describe the proposed final topography of the mining site at the end of mining. Each cross section would show the original (pre-mining) ground surface and the final surface to remain after the cessation of mining. The surfaces depicted must be consistent with the topographic contours shown on the Final Reclamation Site Plan listed as Item 6 above.]

8. REVEGETATION SITE PLAN

[This map sheet(s) would describe the proposed revegetation of the mining site after the cessation of mining. This map would include the species list, planting plan, seed application rates and performance standards for species richness and density. The information provided in Section 3.4.5.3 of this Reclamation Plan must be reproduced on the Revegetation Plan.
